4087378153

350 POTRERO AVENUE SUNNYVALE, CA 94085 TEL: (408) 737-8100 FAX: (408) 737-8153



## RECEIVED CENTRAL FAX CENTER

MAY 1 3 2005

| То:          | Alian          | Olsen        | From:          | Gregory Muir   | 1471 1 3 2003    |
|--------------|----------------|--------------|----------------|----------------|------------------|
| Fax:         | 703-8          | 372-9306     | Pages:         | 7              |                  |
| Phone        | 9:             |              | Date:          | March 25, 2005 |                  |
| Re:          | te: 09/954,864 |              | CC:            |                |                  |
| ———<br>☑ Urg | jent           | ☐ For Review | Please Comment | 🗆 Please Reply | ☐ Please Recycle |

We are in receipt of the Notice of Allowance and in reviewing the file we noticed that we have not received back the Information Disclosure Statement PTO 1449 forms that we filed on October 7, 2004. Attached please find the forms. Please sign and send back to us.

Thanks so much!

Reg No. 35,293

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0851-0031

U.S. Petent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB cooled number.

Complete if Known Substitute for form 1449A/PTO 09/954.864 **Application Number** INFORMATION DISCLOSURE 9/17/01 Filing Date STATEMENT BY APPLICANT First Named Inventor Patel Art Unit 1763 (use as many sheets as necessary) Oisen, Allan Examiner Name of Attorney Docket Number P68-US Sheet . 6 .

|                      |               | ·                                      | U.S. PAT                       | ENT DOCUMENTS                                      |   |
|----------------------|---------------|--|--------------------------------|--|---|
| Exeminer<br>Initials |               | Number-Kind Code <sup>®</sup> (# known | Publication Date<br>MM-DD-YYYY | Name of Patentes or<br>Applicant of Cited Document | Pagas, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Floures Appear   |
|                      | . <del></del> | US- 3.511.727                          | 05-12-1970                     | Haya, R.G.   |   |
|                      | ·             | us. 4.190.488                          | 02-28-1980                     | Winters, H.F.                                      |   |
|                      |               | US- 4,310,380 .                        | 12-12-1982                     | Flamm et al.                                       |   |
| :                    |               | us. 4,498,953                          | 02-12-1985                     | Cook et al:  |   |
|                      | •             | US- 6.061,503                          | 04-18-2000                     | Bhardwel, J.K.                                     |   |
|                      |               | US- 8.438.229                          | 08-20-2002                     | Tai et al.   |   |
|                      |               | US- 6.162.367                          | 12-19-2000                     | Tel el al.   | ريون بيان المان |
|                      |               | US- 6.290.884 B1                       | 09-18-2001                     | Patel et al.                                       | ne bi sem sint i e semente i Pala del III i la labara e se cama es dandes e se como na caba é establica es ca   |
|                      |               | US- 6.355,181 B1                       | 03-12-2002                     | McQuarrie, A.D.                                    |   |
|                      |               | US- 2001/0002663 A1                    | 06-07-2001                     | Tal et al.   |   |
|                      |               | US- 5.439,553                          | 08-08-1995                     | Grant et al.                                       |   |
|                      |               | U\$- 2002/0033229 A1                   | 03-21-2002                     | Lebouitz et al.                                    |   |
| ,,,,                 |               | US- 2002/0198524 A1                    | 12-28-2002                     | Huibers, et al.                                    | **************************************  |
| 104,112 0311,122     |               | US- 2003/0054588 A1                    | 03-20-2003                     | Palei, et al.                                      |   |
|                      |               | US- 5,726,480                          | 03-10-1998                     | Pister, K.S.                                       | ور خصوبه بروسی سیمین کی دست و در به میست مستخدم و در دست در بست مدرد به سند به  |
|                      |               | US- 2002/0185699                       | 12-12-2002                     | Reld   |   |
|                      |               | US- 2002/0121502 A1                    | 09-15-2002                     | Patel, et al.                                      |   |
|                      | 171           | U9- 5,835,256                          | 11-10-1998                     | Hubers, A.   |   |
|                      |               | US- 2002/0047172 A1                    | 04-25-2002                     | Reid   |   |
|                      |               | US- 2003/0186342 A1                    | 09/04/03                       | Chinn, et al.                                      | -   |

|                     |               | FORE   | IGN PATENT C                | OCUMENTS   |   | _            |
|---------------------|---------------|--|-----------------------------|--|---|--------------|
| Examinor<br>Inklais | Cito<br>No. 1 | Country Gode 3 • Number 4 - 'Kind Code 3 (7 known) | Publication Date MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passeges<br>or Relevant Figures Appear | 7            |
| ,                   | · 1/          | EP-0704884-A2 .                                    | 04-03-1996                  | Mehta. J.  |   | <b>"</b>     |
|                     |               | EP-0822582-A2 .                                    | 02-04-1998                  | Bhardwal, J.K.                                     | باد سندهه کواره ( بازی کوچ نامیک باشد باشد باشد باشد باشد باشد باشد باشد        | <b>}</b>     |
|                     |               | EP-0822584-A2                                      | 04-04-1998                  | Bhardwal, J.K.                                     |   | <b>}</b>     |
|                     | .,            | WO-99/49506  | 09-30-1999                  | McQuaria, A.D.                                     |   | <b></b>      |
|                     |               | EP-0878824-A2                                      | 11-18-1998                  | McQuerrieret al.                                   | - THE RIVE  | T            |
|                     |               | EP-0878824-A3                                      | 01-19-2000                  | McQuarrie et al.                                   |   | <del> </del> |
|                     |               | JP-1982/57098679-A                                 | 08-18-1982                  | Tsunetoshi, A.                                     |   | <b></b>      |
|                     |               | JP-1983/58130529-A                                 | 08-04-1983                  | Yoshishlro et al.                                  |   | <b>-</b> -   |
| 17 . (84            |               | JP-1985/60057938-A                                 | 04-03-1965                  | Katsumi et al.                                     | برساندهای به این برود از شهامتری در جویس به دهوستری در هموی به ده دهوست.        |              |
|                     |               | WO-98/32163  | 07-23-1898                  | Tai et al.   | ا مستند در                                  |              |

| Examiner  | j ·                                     | • | Onto       |   |
|-----------|---|---|------------|---|
|           | ì                                       |   | .Date      | · |
| Signature | <u></u>                                 | - | Considered |   |
|           | **************************************  |   | Contaction |   |
|           | *************************************** |   | Considered |   |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Oraw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*Applicant's unique citation designation number (onlines): 3 See Viede Code a Code a Code and Code an

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will very depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief information Officer, U.S. Patent and Trademerk Office, Weehington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Weshington, DC 20231.

Applicant's unique ditation designation number (options). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.cov">www.uspto.cov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emporor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

control number.

of

PTO/SB/08A (10-01) Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB

Complete if Known Substitute for form 1449A/PTO 09/954,864 Application Number -INFORMATION DISCLOSURE Filling Date 9/17/01 STATEMENT BY APPLICANT First Named Inventor Patel Art Unit 1763 (use as many sheets as necessary) Olsen, Allan Examiner Name Sheet Attorney Docket Number P68-US

|                      |                   |  | U.S. PAT                                      | ENT DOCUMENTS                                      |   |
|----------------------|-------------------|--|---|--|---|
| Exeminer<br>Initials |                   | Document Number Number-Kind Code* (# known | Publication Data<br>MM-DD-YYYY                | Name of Patentee or<br>Applicant of Cited Document | Peges, Columns, Lines, Where<br>Relevant Pesseges or Relevant<br>Figures Appear                 |
| • • • • • •          |                   | US- 6,409,876 B1                           | 08-25-2002                                    | McQuarrie, et al.                                  |   |
|                      | y+ ==,+= <b>a</b> | us. 6,396,619 B1                           | 05-28-2002                                    | Huibers, et at.                                    |   |
|                      | <br>              | U8- 6,576,489 B2                           | 06/10/03                                      | Leung, et s  |   |
|                      |                   | Us. 6,238,581                              | 05-29-2001                                    | Hawkins, et al.                                    |   |
|                      | ** ***            | US- 8.115.172                              | 09-05-2000                                    | Jeong  |   |
|                      |                   | US- 6.204.080                              | .03-20-2001                                   | Hwana  | Andrew St.  |
|                      |                   | US- 2003/0071015 A1                        | 04/17/03                                      | Chino, et al.                                      | om på til Matainen men enn ennerennen TM MTM till (Mille millennen en men menne og gygr og<br>e |
|                      |                   | US- 2002/0164879 A1                        | 11/07/02                                      | Leuno, et al.                                      | ne manuscrier in trigliculus. I je mederne manus probite nos de mini decembrança pa que         |
|                      |                   | US- 2002/0163051 A1                        | 11/07/02                                      | Gopal, et al.                                      |   |
|                      |                   | US- 2003/0077878 A1                        | 04/24/03                                      | Kumer, et el.                                      |   |
|                      |                   | US- 6,197,610 B1                           | 03/06/2001                                    | Toda   | **************************************  |
|                      |                   | US- 6.500,356 B2                           | 12/31/02                                      | Goto, et al.                                       |   |
|                      |                   | US- 2003/0124848 A1                        | 0703/03                                       | Chinn, et al.                                      | • ,   |
|                      |                   | US- 2003/0219988 A1                        | 11/27/03                                      | Raliner, et al.,                                   |   |
| •                    |                   | US- 4551,197                               | 11/05/85                                      | Guilmette, ret al.                                 |   |
|                      |                   | US-  |   |  |   |
|                      |                   | US-  |   | **************************************             | · · · · · · · · · · · · · · · · · · ·   |
|                      | <b>T</b>          | US-  | ـــــــــــــــــــــــــــــــــــــ         |  |   |
|                      | · . · · · · · · · | US-  | / Mides Is — соно — — — соно — — (полуде<br>- | ***************************************            |   |
| ·                    |                   | US-  |   |  |   |

|                      |                                       | FORE   | <b>IGN PATENT D</b>            | OCUMENTS   | -   |                |
|----------------------|---------------------------------------|--|--------------------------------|--|---|----------------|
| Examiner<br>Initials | Cite<br>No.1                          | Country Code 3 - Number 4 - Kind Code * (Floren) | Publication Date<br>MM-DD-YYYY | Namo of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Whom Relevant Passages<br>or Relevant Figures Appair                                  | T <sup>6</sup> |
|                      |                                       | JP-1997/09251981-A                               | 09-22-1997                     | Kazuaki et el,                                     |   | -              |
|                      |                                       | JP-1998/10313128-A                               | 11-24-1998                     | Henmin et al.                                      | ion pr <del>antin</del> «, 19 <del>10161 d'alle a mais a mais a mais a</del> ngle <del>qu'imp</del> (1, 4, 4, 4 |                |
| .,                   |                                       | JP-1998/10317169-A                               | 12-02-1998                     | M¢Quarrie et al.                                   |   |                |
|                      |                                       | JP-1986/61187238-A                               | 08-20-1986                     | Nobuo et al.                                       |   | **********     |
| <br>                 |                                       | JP-1986/61270830-A                               | 12-01-1988                     | Torb, T,   | **************************************  |                |
|                      | ··· <del>····</del>                   | JP-1987/62071217-A                               | 04-01-1987                     | Toru et al.  |   |                |
|                      | *** * ***                             | JP-1988/63155713-A                               | 08-28-1988                     | Tedashi, F.  | ***************************************   |                |
|                      | · · · · · · · · · · · · · · · · · · · | JP-1986/61053732-A                               | 03-17-1986                     | Arata et al.                                       |   | ·              |
|                      |                                       | JP-1986/81134019-A                               | 06-21-1986                     | Shinil et al,                                      |   |                |
|                      |                                       | JP-1986/61181131-A                               | 08-13-1986                     | Shinil et al.                                      | *#  |                |

|           | T 10 10 10 10 10 10 10 10 10 10 10 10 10 | W    |            |  |
|-----------|--|------|------------|--|
| Examiner  | •  |      | Data       |  |
|           |  |      | Date       |  |
| Signature |  |      | Considered |  |
| <b>A</b>  |  | **** |            |  |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademerk Officer, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uapto.gov">www.uapto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3), <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>a</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>a</sup> Applicant is to place a check mark here if English language Translation is ettached.

PTO/SB/08A (10-01)
Approved for use through 10/31/2002, OM8 0851-0031
U.S. Palent and Trademark Office: U.S. DEPARTMENT OF COMMERCE control number. control number.

Complete If Known Substitute for form 1449A/PTO 09/954,864 **Application Number** INFORMATION DISCLOSURE Filing Date 9/17/01 STATEMENT BY APPLICANT First Named Inventor Patel **Art Unit** 1763 (use as many sheets as necessary) Olsen, Allan Examiner Name Sheet of Attorney Docket Number P68-US

|                      | ,  |   | U.S. PATE   | NT DOCUMENTS   |  |
|----------------------|----|---|---|--|--|
| Examiner<br>Initials |    | Number- Knd Code <sup>2</sup> (II knawn | Publication Date MM-DD-YYYY   | Name of Patentee or<br>Applicant of Cited Document   | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant  |
|                      |    | US-                                     |   |  | Figures Appear   |
|                      |    | US-                                     | ***************************************                                 | Чен ( <del>помендава   1888) (18 (Пр. ), пред поменда на Пренер приводу пред 18 година на состоявление поставление</del>   | Bitt Billy and an arrangement of a blood water a second of the second by the base of an arrange to be a second or  |
|                      |    | us-                                     |   |  |  |
|                      |    | US-                                     | A 175   |  |  |
|                      |    | US-                                     |   | · · · · · · · · · · · · · · · · · · ·  |  |
|                      |    | U\$-                                    | ***************************************                                 |  |  |
|                      |    | US-                                     |   | * Toursement to the transfer of the same and the same additional to the same and th             |  |
|                      |    | US-                                     |   |  | The same of the sa |
|                      |    | US-                                     |   | The shields were now necessary in 14 for continuous necessary (18 Million of the state of the  |  |
|                      |    | US-                                     |   | - B offer of section to the state of the section of the section of the state of the state of the section of the             |  |
|                      |    | US.                                     |   |  | - Translation  |
|                      |    | US-                                     |   | - HIM  | and a service of the  |
|                      |    | US-                                     |   |  | Pfrance:   |
|                      |    | Us-                                     | **************************************                                  |  |  |
|                      |    | US-                                     |   | * C P <sup>*</sup> Common march = 19 (\$PCod march to march a particle (and the semination of particle (an |  |
|                      |    | US-                                     | P   |  |  |
|                      | ., | US-                                     |   | between removes a seem 1944 print to the second second 1974 print to the second             | ويودان والمدانسين بالمراجلية والإستناق فاستنباها ويسوق وروا والم والمساور والم   |
|                      |    | US-                                     |   |  |  |
|                      |    | US-                                     |   |  |  |
|                      |    | US                                      | عد من من من الله في الله الله من الله الله الله الله الله الله الله الل | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~   | · · · · · · · · · · · · · · · · · · ·  |

|   | ,                        | FORE   | IGN PATENT                             | OCUMENTS   |   | -            |
|---|--------------------------|--|--|--|---|--------------|
| Examiner<br>Initials                    | Cite<br>No. <sup>(</sup> | Country Code 3 - Number 4 - Kind Code 5 (Fixeour)  | Publication Data<br>MM-DD-YYYY         | Name of Patentes or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Pessegee<br>or Relevant Figures Appear | -            |
| *************************************** | <b>-</b> 🗸               | JP-1989/01208834-A   | 08-22-1989                             | Nobuo et al.                                       |   | <del> </del> |
|   |                          | JP-1989/10217921-A   | 08-31-1989                             | Tsuneo et al.                                      | ······································  |              |
|   |                          | JP-1990/02250323-A   | 10-08-1990                             | Susumu et al.                                      | **************************************  | <b>-</b>     |
|   | Pama                     | JP-1991/03012921-A   | 01-21-1991                             | Nobuo et al.                                       | ٠٠  | ļ            |
|   |                          | JP-1992/04096222-A   | 03-27-1992                             | Ataūvuki, A.                                       |   | ┟╌┯          |
| ·                                       |                          | JP-1995/07029823-A   | 01-31-1995                             | Hiroshi. T.  | 7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-  |              |
| ·                                       | ,                        |  |  | ***  |   | W++ +- Free  |
|   |                          | and the state of t | - · <b>&amp;·</b>                      | 19 Mail anns                                       |   |              |
|   |                          |  | · ************************************ |  |   |              |

|                       |   | <u> </u>    |          |
|-----------------------|---|-------------|----------|
| Examiner              |   |             |          |
|                       | • | Date        | •        |
| Signature             | • | Considered  |          |
| MCV 4 4 4 1 4 1 5 5 5 |   | Codisideted | <u> </u> |

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Z Sea Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.nov">www.uspto.nov</a> or MPEP 801,04. Tenter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the petent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will very depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Commissioner for Patents, Weahington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant

PTO/SB/08B (10-01)

Approved for use through 10/31/2002, OMB 0851-0031

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete If Known Substitute for form 1449B/PTO 09/954,864 Application Number INFORMATION DISCLOSURE Filing Date 9/17/01 STATEMENT BY APPLICANT First Named Inventor Patel Group Art Unit: 1763 (Vse as many sheets as necessary) **Examiner Name** Olsen, Allan Sheet of Attorney Docket Number P88-US

|  |                                 | OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS  |   |
|--|---------------------------------|--|---|
| Examiner<br>Initials                   | Cite<br>No. 1                   | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the litem (book, magazine, journal, serial, symposium, catalog, etc.), data, page(s), volume-lesses number(s), outlisher, city and/or country where published |   |
|  |                                 | ALIEV et al., "Dovelopment of Si(100) Surface Roughness at the Initial Stage of Etching in F2 and XeF2 Gases Ellipsometric Study", Surface Science 442 (1999), pp. 208-214.  |   |
| 99. 11 ° 2-11 amount                   |                                 | GLIDEMEISTER, J.M., "Xenon Difluoride Etching System" (Nov. 17, 1997).   |   |
|  |                                 | HABUKA et al., "Dominant Overall Chemical Reaction in a Chlorine Trifluoride-Silicon-Nitrogen System at Atmospheric Pressure", Japan Journal of Applied Physics Vol. 38 (1999), pp. 6466-6469,   | _ |
|  |                                 | HECHT et al., "A Novel X-ray Photoelectron Spectroscopy Study of the Al/SiO2 Interface", J. Appl. Phys. Vol. 57 (June 15, 1985), pp. 5256-5261.  | _ |
|  |                                 | HOULE, F.A., "Dynamics of SIF4 Description During Etching of Silicon by XeF2", IBM Almeden Research Center (April 15, 1987), pp. 1886-1872.  |   |
|  | · • · · · · · · · · · · · · · · | FLAMM at al., "XeF2 and F-Atom Reactions with SI; Their Significance for Plasma Etching", Solid State Technol. 26, 117 (1983).   |   |
|  | BB- 1-884 P - 41 - 18           | ISBOTSON et al., "Plasmeless Dry Etching of Silicon with Fluorine-containing Compounds", J. Appl. Phys. Vol. 56 No. 10 (Nov. 1984), pp. 2939-2942.   |   |
| · 1.84                                 |                                 | f88OTSON et al., "Comparison of XoF2 and F-atom Reactions with Si and SiO2", Applied Physics Letter, Vol. 44, 1129 (1984),   |   |
|  |                                 | STRELLER et al., "Selectivity in Dry Etching of SI (100) and XeF2 and VUV Light", Elsevier Science B.V., Applied Surface Science Vol. 106 (1996), pp. 341-346.   |   |
| ·· • • • • • • • • • • • • • • • • • • |                                 | VUGTS et al., "SVXeF2 Etching: Temperature Dependence", J. Vac. Sci. Technol, A 14(5) (Sep/Oct 1996), pp. 2768-2774.   |   |
|  |                                 |  |   |
|  |                                 | WINTERS, H.F., "Etch Products from the Reaction of XeF2 with SiO2, SiO3, Si3N4, SiC, and Si in the Presence of Ion Bombardment". J. Vac. Sci. Technol. B 1(4) (Oot/Dec 1983), pp. 927-931.   | - |
|  |                                 |  |   |

|                |                   | •  |
|----------------|-------------------|--|
| <u> </u>       |                   |  |
| i Evaminas i : | <br>              | The state of the s |
| Examiner       | I =               |  |
|                | l Nata            | · 1  |
| I A 1          | Date              | 1  |
| Signature      |                   | · · · · · · · · · · · · · · · · · · ·  |
|                | 1 4 4 4           | .1   |
|                | <br>i (:Angidarad | / <b> </b>   |
|                | <br>L.Considered  | <u>l</u>   |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not diletion is in conformance with MPEP 609. Orew line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>3</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a chask mark here if English tanguage Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will very depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents,

control number.

4087378153

PTO/88/08B (10-01)

Approved for use through 10/31/2002. ONB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE control number.

| Substitute for form 14498/PTQ |                   |             |              | Complete if Known      |              |  |  |
|-------------------------------|-------------------|-------------|--------------|------------------------|--------------|--|--|
| INFO                          | LIANTANS          | 110         | CI OCUDE     | Application Number     | 09/954.884   |  |  |
| INFORMATION DISCLOSURE        |                   |             | ·            | Filing Date            | 9/17/01      |  |  |
| STATEMENT BY APPLICANT        |                   |             |              | First Named Inventor   | Patel        |  |  |
|                               |                   |             | •            | Group Art Unit         | 1763         |  |  |
| •                             | luse as many shee | <u>is e</u> | s necessary) | Examiner Name          | Olsen, Alian |  |  |
| Sheet                         | 5 .               | ŏ           | 6            | Attorney Docket Number | P68-US       |  |  |
|                               |                   | _           |              |                        |              |  |  |

|                             | T**                      | OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS  |              |
|-----------------------------|--------------------------|--|--------------|
| Examiner<br>Initials        | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journel, serial, symposium, cetalog, stc.), date, page(s), volume-issue number(s) publisher city tod/or country where nublished.  |              |
|                             |                          | Kurt Williams, Etch Rates for Micromachining Processing-Part II, 2003 IEEE, Pgs 761-778, Journal of Microelectromachanical Systems, Vol. 12, No. 8, December 2003.   |              |
|                             |                          | WINTERS et al., "The Etching of Silicon with XeF2 Vapor". Appl. Phys. Lefter, Vol. 34(1) (January 1, 1979), pp. 70-73.   |              |
|                             |                          | XACTIX, Inc., Marketing Brochure (June 27, 1999).  |              |
| 1 1 9 M dailhe afear ann ea |                          | "Xenon Diffuoride Isotropic Etch System: Seeing is Believing", Surface Technology Systems Ltd. brochurs,<br>Newport, UK (dale unknown).  |              |
|                             |                          | CHU et al., "Controlled Pulse-Etching with Xenon Diffueride", International Solid State Sensors and Actuators Conference (Transducers '97), Chicago, IL, Vol. 1 (June 16 - 19, 1997), pp. 665-668 (abstract only).   |              |
|                             |                          | BASSOM et al., "Modeling and Optimizing XeF2-enhanced FtB Milling of Silicon", 25th International Symposium for Testing and Failure Analysis, Santa Clara, CA (Nov. 14 -18, 1999), pp. 255-261 (abstract only).  |              |
|                             |                          | KOHLER et al., "Fabrication of Microlenses by Plasmaless isotropic Etching Combined with Plastic Moulding", Sens, Actuators A, Phys. (Switzerland), Vol. A53, No. 1-3 (May 1896), pp. 361-363 (abstract only),   | -            |
|                             |                          | CHAN et al., "Gas Phase Pulse Etching of Silicon for MEMS with Xenon Diffuoride", Engineering Solutions for the Next Millentum: 1999 IEEE Canadisn Conference on Electrical and Computer Engineering, Edmonton. Alberta, Vol. 3 (May 9 - 12, 1999), pp. 1637-1642 (abstract only).   | -            |
| 71 70.50                    |                          | CHANG et al., "Gas-Phase Silicon Micromachining with Silicon Disuoride". Proceedings of the SPIE - The International Socily for Optical Engineering, Vol. 2641 (1985), pp. 117-128 (abstract only).  | <del> </del> |
|                             |                          |  |              |
|                             | 1 House 18 4-41          |  |              |
|                             |                          | 1 mar and a speciment of the state of the st | -            |
|                             |                          |  |              |

| Examiner '  | ·      | -1-           |
|---|--------|---------------|
| Signature   | . I Da | ate;          |
| Oldivarrie I  | Cr     | onsidered     |
| VALUATOR LONG TO THE TAXABLE TO THE |        | SHISTOCK SUIT |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant,

<sup>\*</sup> Applicant's unique citation designation number (optional). \* Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will very depending upon the needs of the individual case. Any comments on the emount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademerk Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents,

Sheet

of

Approved for use through 10/31/2002, OMB 0851-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete If Known Substitute for form 1449B/PTO **Application Number** 09/954,884 INFORMATION DISCLOSURE Filing Date 9/17/01 STATEMENT BY APPLICANT First Named Inventor Patel Group Art Unit: 1763 (use es many sheets es necessary) Examiner Name Olsen, Allen

Attorney Docket Number

P68-US

|                            | OTUED DOIGH ART MONTAGE -  |  |  |  |
|----------------------------|--|--|--|--|
| - <u> </u>                 | OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS  |  |  |  |
| Examiner City Initials No. | tiam (book, magazina, journal, serial, symposium, catalog, etc.), date, page(s), volume-lasue number(s), oublisher, city and/or country where published.   |  |  |  |
|                            | SEBEL, et al., "Reaction Layer Dynamics in Ion-Assisted Si/XaF2 Etching: Temperature Dependence", J. Vac. Sci. Technol. A. Vac. Surf. Films, Vol. 18, No. 8, (Nov. 2000), pp. 2759-2769 (abstract only).   |  |  |  |
|                            | SEBEL et al., "Silicon Etch Rate Enhancement by Traces of Metal", J. Vac. Sci. Technol. A, Vac. Surf. Films, Vol. 17, No. 3, (May/June 1999), pp. 755-762 (abatract only).   |  |  |  |
|                            | SUGANO et al., "Study on XeF2 Pulse Etching Using Wagon Wheel Pattern", Proceedings of the 1999 International Symposium on Micromechantronics and Human Science: Towards the New Century, Negoya, Japan (Nov. 23 - 28, 1999), pp. 163-167 (abetract only).   |  |  |  |
|                            | WANG et al., "Gas-Phase Silicon Etching with Bromine Trifluoride", International Solid State Sensors and Actuators Conference (Transducers '97), Chicago, IL. Vol. 2 (June 16 - 19, 1997), pp. 1505-1508 (abstract only).  |  |  |  |
|                            | MUTHUKUMARAN et al., "Gas-Phase Xenon Difluoride Etching of Microsystoms Fabricated Through the Mitel 1.5-mu m CMOS Process". Can. J. Electr. Comput. Eng. (Canada), Vol. 25, No. 1 (Jan. 2000), pp. 35-41 (abstract only).  |  |  |  |
|                            | TODA et al., "Thin Beam Bulk Micromachining Based on RIE and Xenon Diffuoride Sillcon Etching", International Solid State Sensors and Actuators Conference (Transducers '97), Chicago, IL, Vol. 1 (June 16 - 19, 1997), pp. 871-674.   |  |  |  |
|                            | SEBEL et al., "Etching of Si Through a Thick Condensed XeF2 Layer", J. Vac. Sci. Technol. A, Vac. Surf. Films, Vol 18, No. 5 (Sept/Oct 2000), pp. 2090-2097 (abstract only).   |  |  |  |
|                            |  |  |  |  |
|                            |  |  |  |  |
| ·                          |  |  |  |  |
|                            | A Section of the second of the |  |  |  |
|                            |  |  |  |  |
|                            |  |  |  |  |
|                            |  |  |  |  |

|           | - | <br>       |   |   |   |
|-----------|---|------------|---|---|---|
| Fueniana  |   | <br>***    |   | • |   |
| Examiner  |   | Date       | • |   | _ |
| Signature |   |            |   |   |   |
|           |   | Considered | • |   |   |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not cliation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant,

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English tenguage Translation is attached.

Burden Hour Statement; This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents,